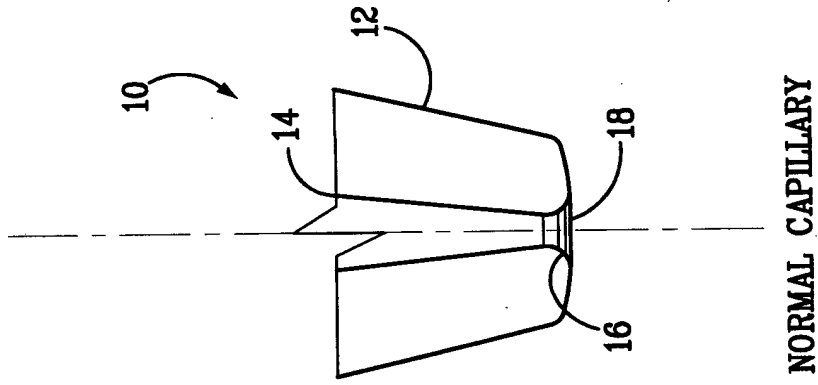
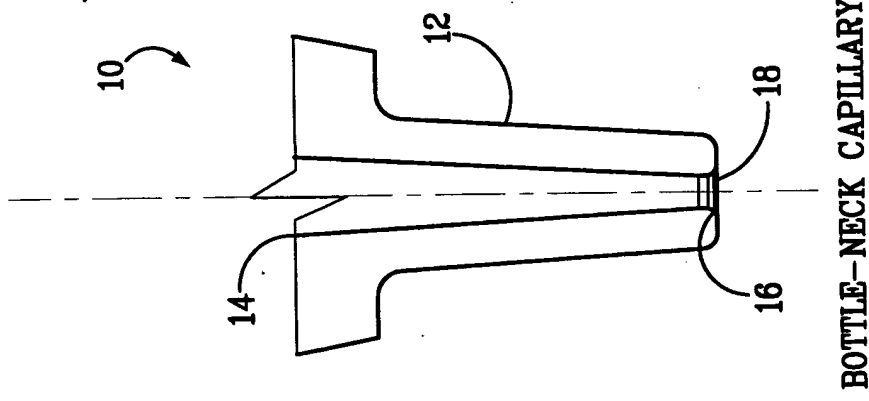


PRIOR ART



NORMAL CAPILLARY

PRIOR ART



BOTTLE-NECK CAPILLARY

PRIOR ART

FIG. 3

FIG. 2

FIG. 1

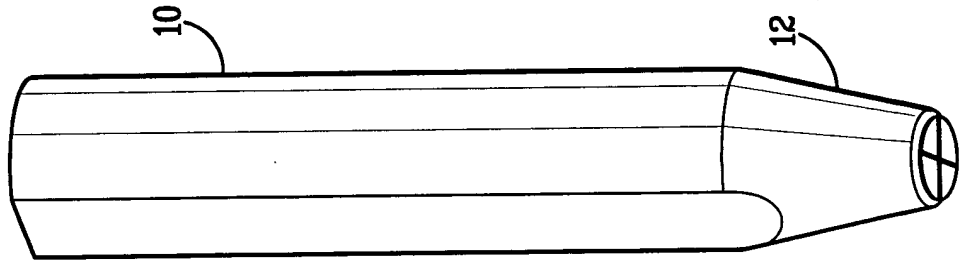


FIG. 4

PRIOR ART

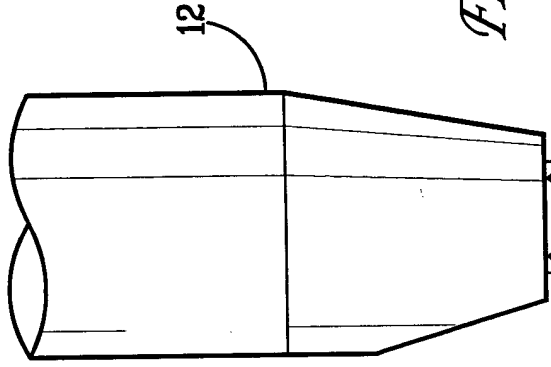


FIG. 5A

PRIOR ART

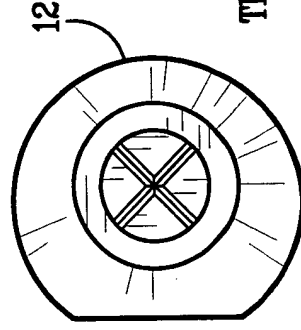


FIG. 5B

TIP DETAIL

PRIOR ART

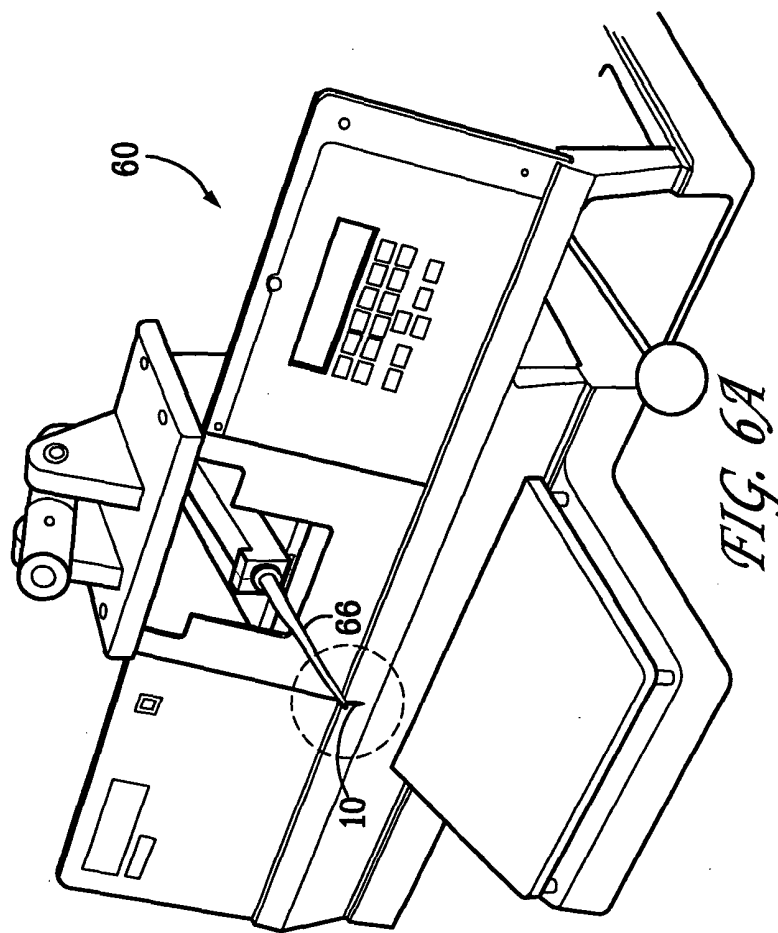
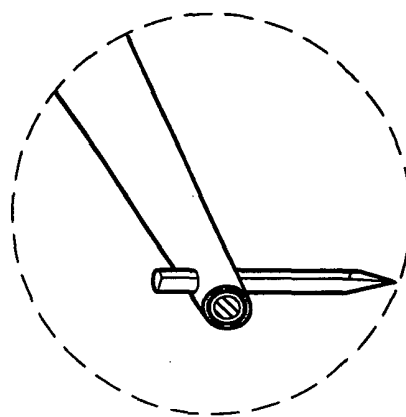


FIG. 6A

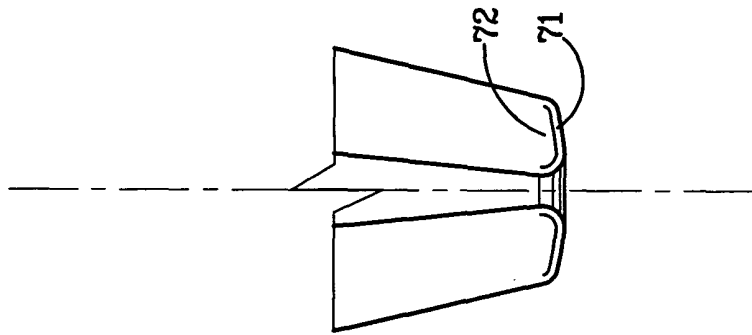
PRIOR ART



Transducer Horn Tip and Wedge Detail

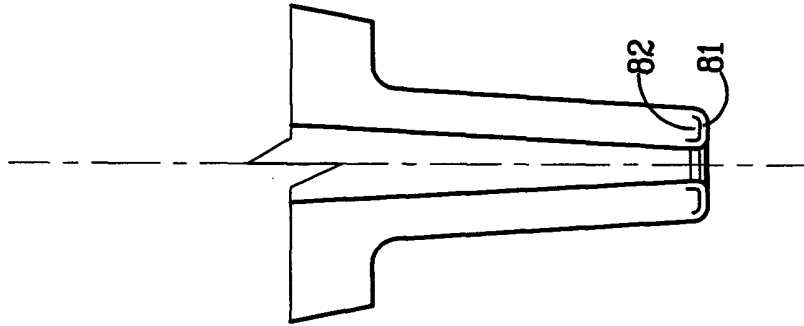
FIG. 6B

PRIOR ART



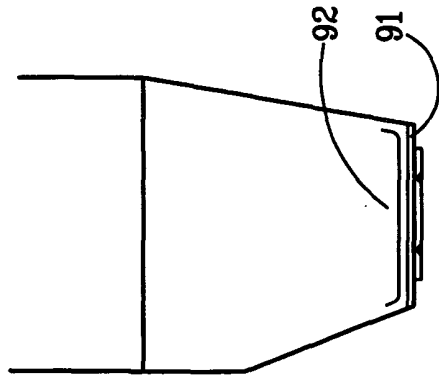
NORMAL CAPILLARY

FIG. 7



BOTTLE-NECK CAPILLARY

FIG. 8



TIP DETAIL

FIG. 9

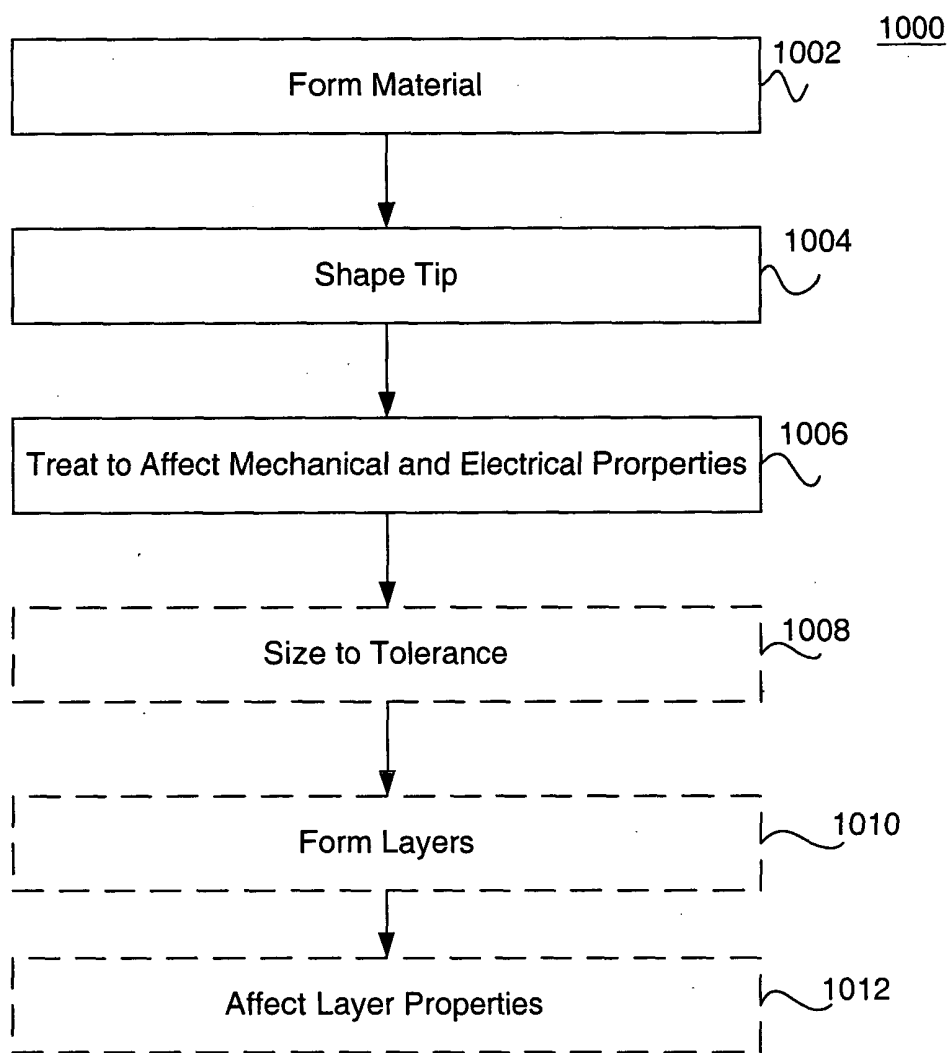


FIG. 10

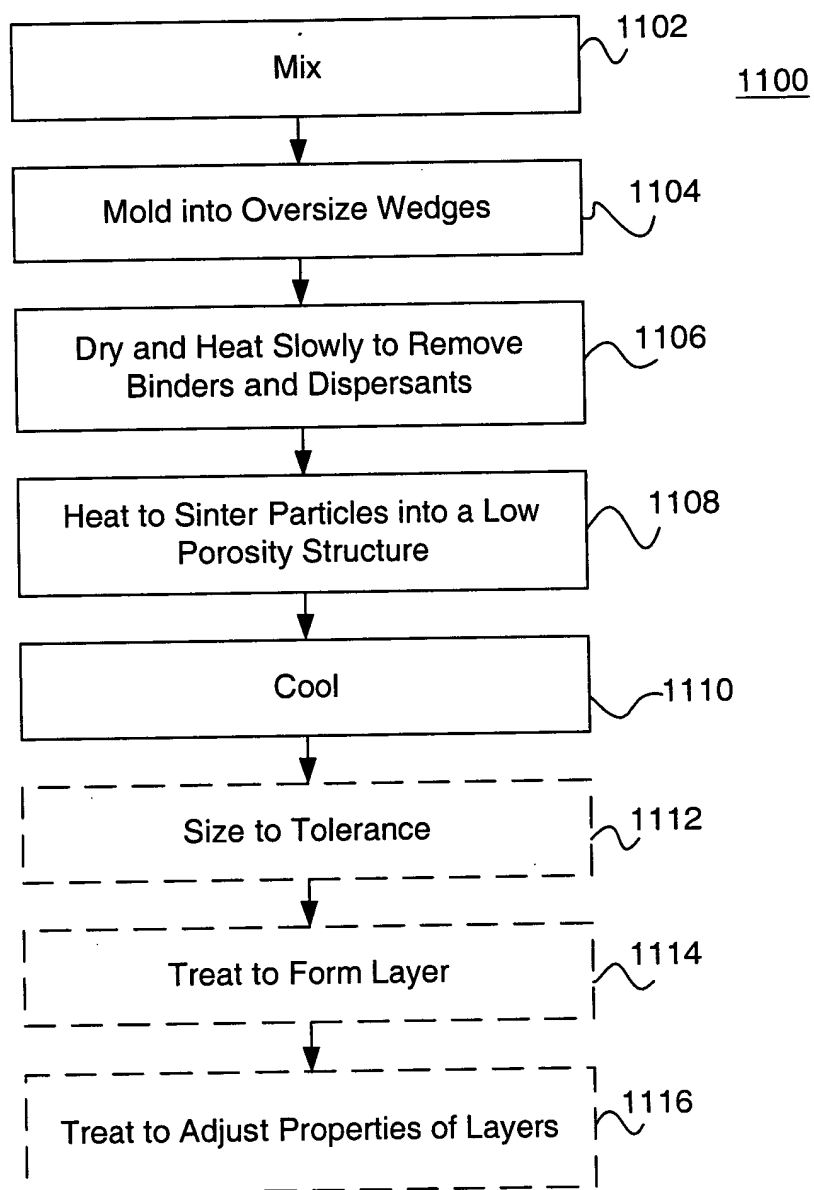


FIG. 11

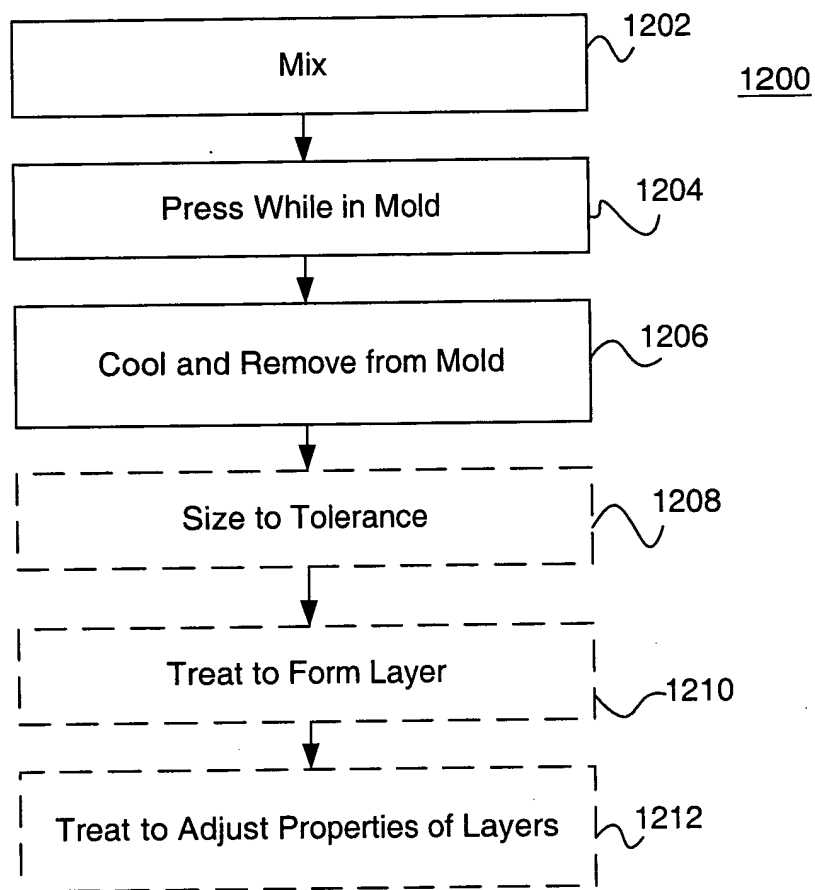


FIG. 12

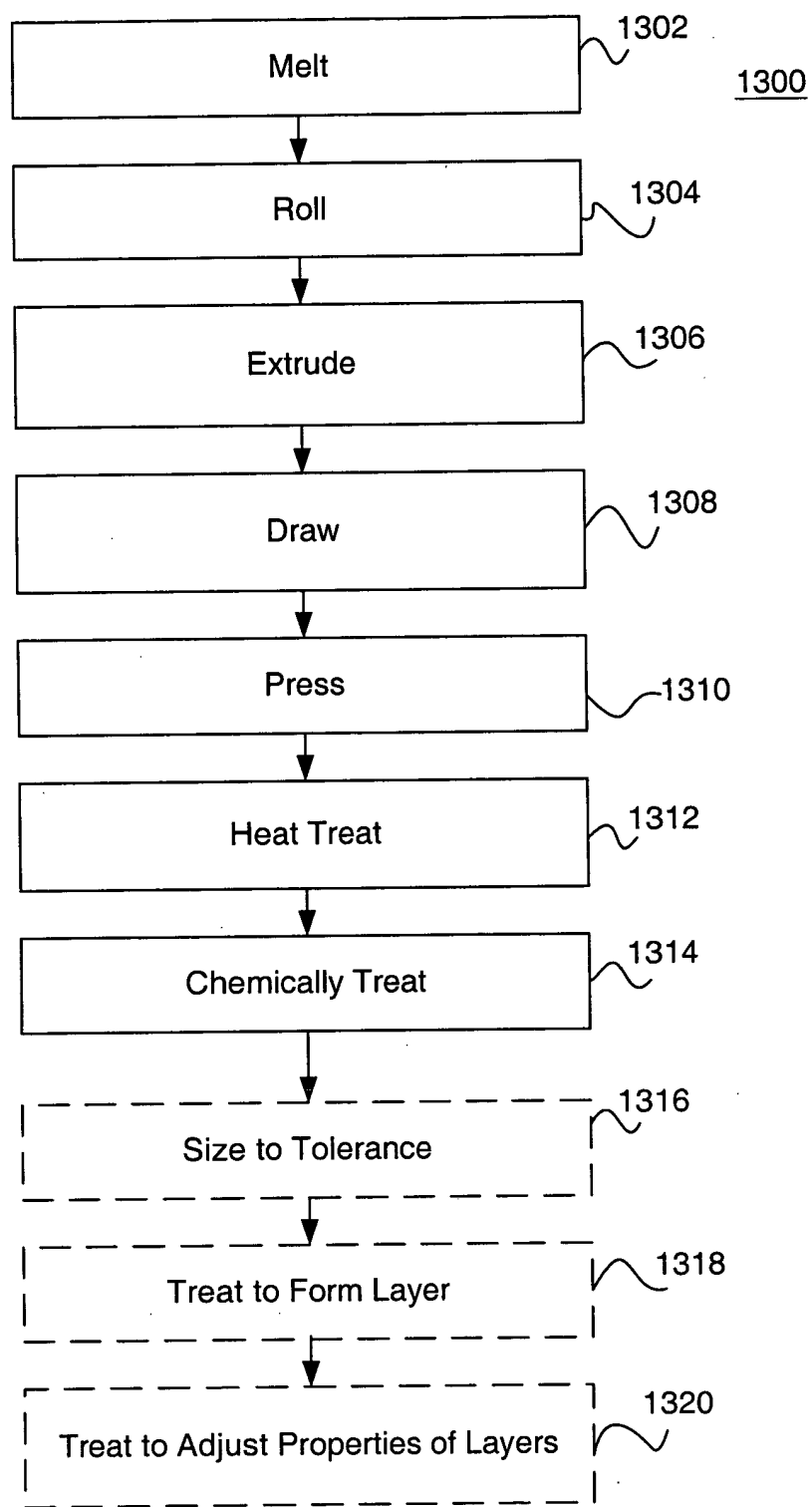


FIG. 13

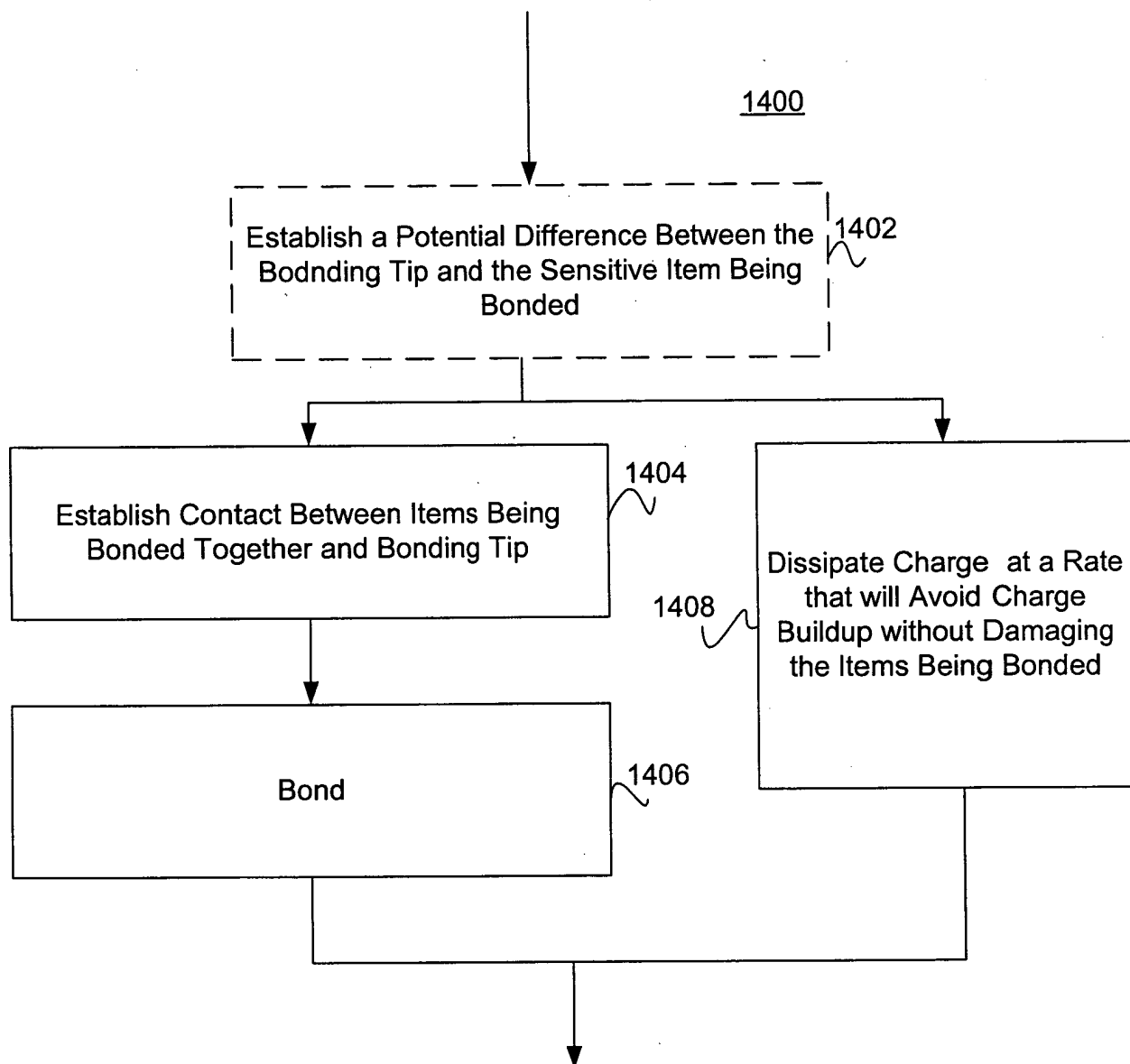


FIG. 14

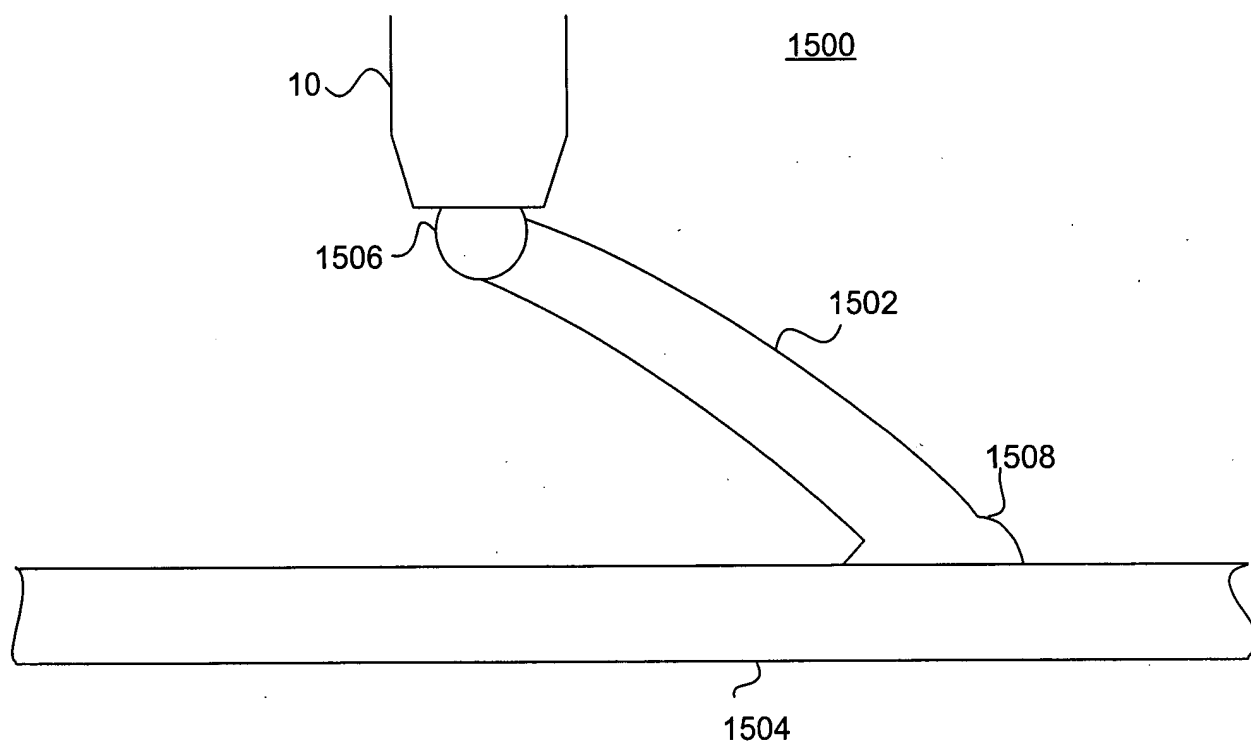
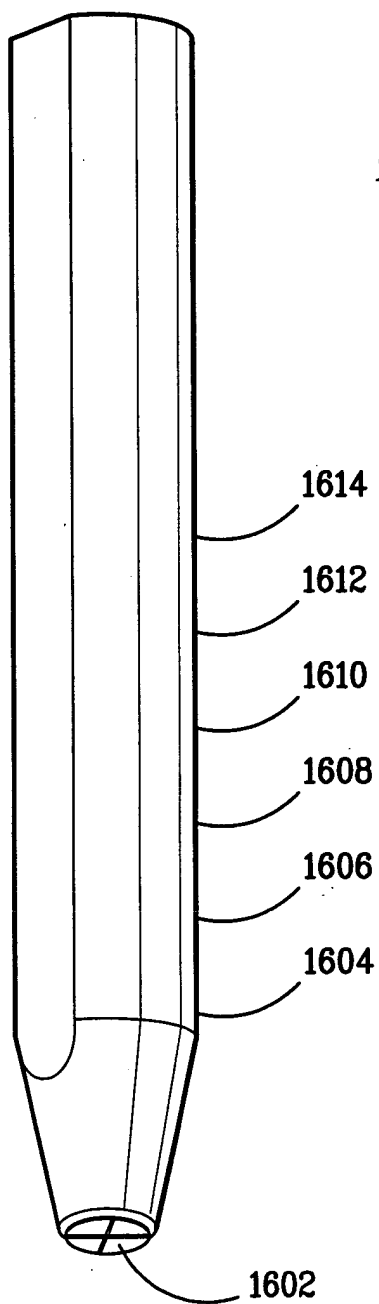


FIG. 15

FIG. 16



Reading @	Rod #1		Rod #2	
	10V	100V	10V	100V
1"	$2.11 \times 10^8 \Omega$	$1.80 \times 10^8 \Omega$	$2.38 \times 10^8 \Omega$	$1.89 \times 10^9 \Omega$
2"	$2.78 \times 10^8 \Omega$	$2.42 \times 10^8 \Omega$	$4.13 \times 10^8 \Omega$	$3.63 \times 10^8 \Omega$
3"	$3.34 \times 10^8 \Omega$	$3.03 \times 10^8 \Omega$	$5.49 \times 10^8 \Omega$	$5.17 \times 10^8 \Omega$
4"	$4.35 \times 10^8 \Omega$	$4.09 \times 10^8 \Omega$	$8.52 \times 10^8 \Omega$	$8.25 \times 10^8 \Omega$
5"	$5.67 \times 10^8 \Omega$	$5.46 \times 10^8 \Omega$	$1.27 \times 10^9 \Omega$	$1.22 \times 10^9 \Omega$
6"	$7.05 \times 10^8 \Omega$	$6.93 \times 10^8 \Omega$	$1.26 \times 10^9 \Omega$	$1.23 \times 10^9 \Omega$
Average	$4.22 \times 10^8 \Omega$	$3.96 \times 10^8 \Omega$	$7.64 \times 10^8 \Omega$	$1.01 \times 10^9 \Omega$
Minimum	$2.11 \times 10^8 \Omega$	$1.80 \times 10^8 \Omega$	$2.38 \times 10^8 \Omega$	$3.63 \times 10^8 \Omega$
Maximum	$7.05 \times 10^8 \Omega$	$6.93 \times 10^8 \Omega$	$1.27 \times 10^9 \Omega$	$1.89 \times 10^9 \Omega$

FIG. 17

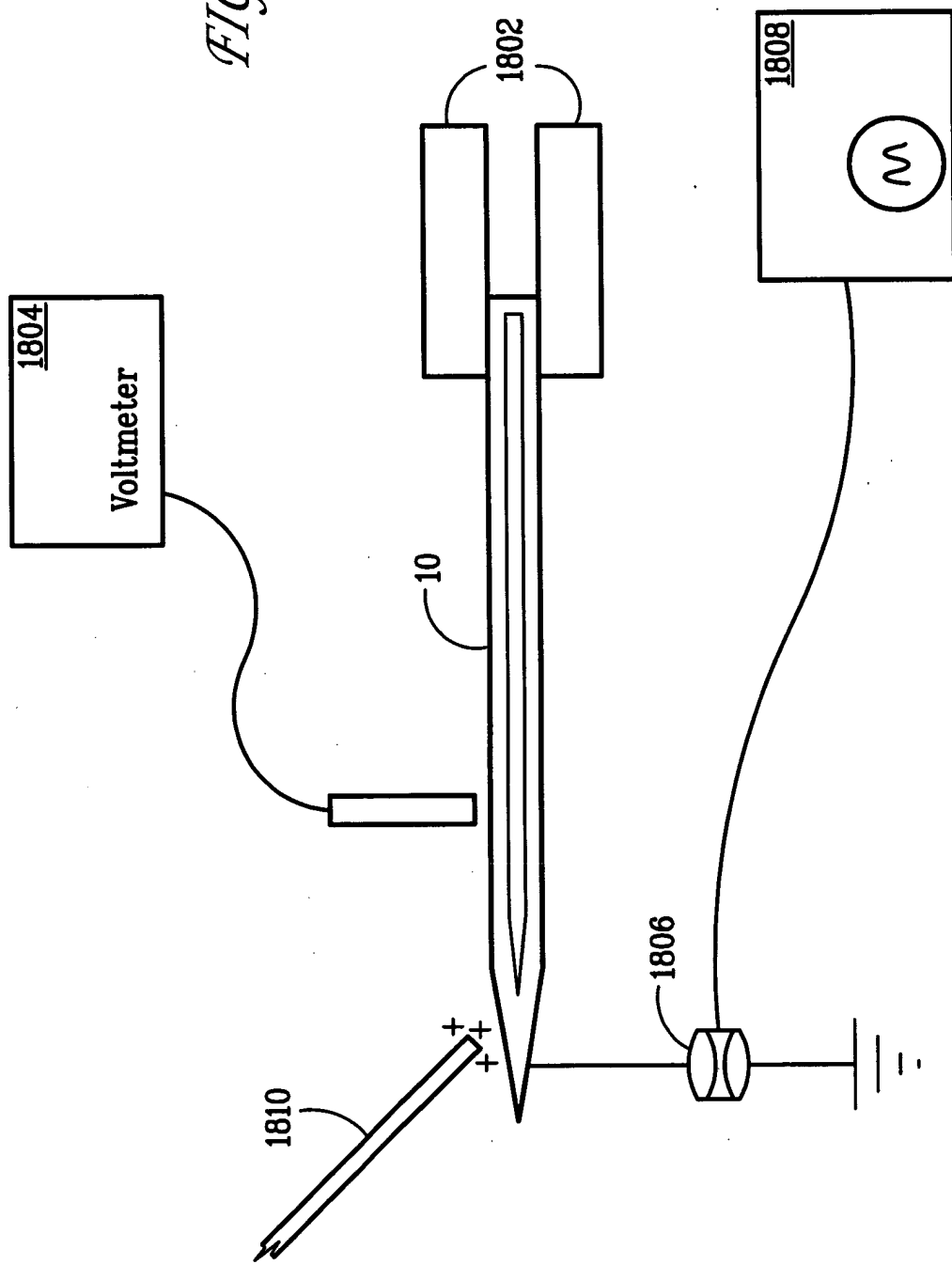


FIG. 18

Reading #	Small Diameter Rod #1	Small Diameter Rod #2
1	0.16 sec.	0.48 sec.
2	0.16 sec.	0.21 sec.
3	0.20 sec.	0.12 sec.
4	0.21 sec.	0.22 sec.
5	0.21 sec.	0.23 sec.
6	0.15 sec.	0.22 sec.
Average	0.18 sec.	0.25 sec.
Minimum	0.15 sec.	0.12 sec.
Maximum	0.21 sec.	0.48 sec.

FIG. 19

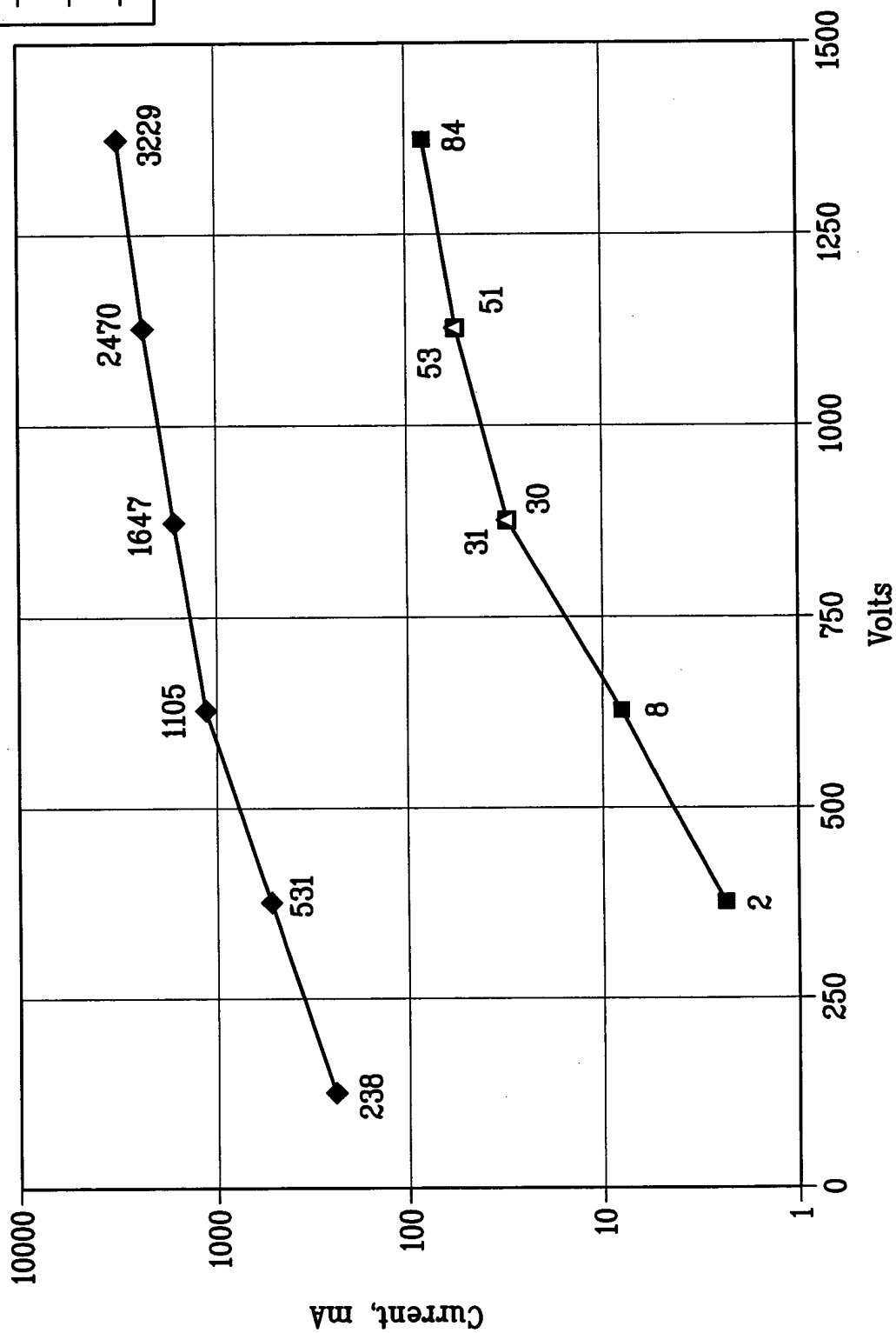
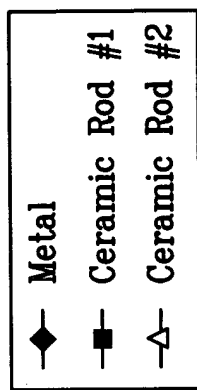


FIG. 20